



Kentucky Agricultural Statistics Service
P.O. Box 1120
Louisville, Kentucky 40201-1120
(502) 582-5293 or 1-800-928-5277

KENTUCKY WEEKLY CROP & WEATHER REPORT



Prepared in Cooperation with:
Univ. of Ky - Agr'l Weather Center
U.S. Dept. of Commerce - NOAA
Kentucky Department of Agriculture
Cooperative Extension Service

LELAND E. BROWN, State Statistician

November 2000 - March 2001

March 26, 2001

This first Crop & Weather Report of 2001 is a summary of winter weather. Freeze probabilities are included on the next page. The regular releases will begin on April 2. The primary purpose of the weekly report is to provide producers, agricultural media and others with up-to-date information on crops, moisture, temperatures, etc. Information is made possible through cooperation of the University of Kentucky Agricultural Weather Center, National Weather Service, County Agricultural Agents of the Extension Service, voluntary crop reporters and weather observers.

KENTUCKY WINTER WEATHER SUMMARY 2000 - 2001				
CITY	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
LEXINGTON				
Avg. Temperature	44.0E	25.0E	32.0E	41.0E
30 Year Avg.	44.9E	36.1E	31.5E	34.7E
Precipitation	2.00"	3.64"	1.33"	3.55"
Precip. Normals	3.39"	3.98"	2.86"	3.21"
JACKSON				
Avg. Temperature	45.0E	28.0E	34.0E	43.0E
30 Year Avg.	42.5E	33.8E	31.4E	33.2E
Precipitation	1.46"	4.33"	2.50"	3.74"
Precip. Normals	3.88"	4.14"	3.29"	3.60"
PADUCAH				
Avg. Temperature	45.0E	27.0E	33.0E	42.0E
30 Year Avg.	46.7E	37.8E	33.3E	37.4E
Precipitation	4.77"	2.62"	0.93"	4.97"
Precip. Normals	4.32"	4.68"	3.27"	3.90"
LOUISVILLE				
Avg. Temperature	44.0E	25.0E	33.0E	41.0E
30 Year Avg.	46.1E	37.2E	32.5E	36.0E
Precipitation	2.98"	4.52"	1.51"	3.78"
Precip. Normals	3.70"	3.64"	2.86"	3.30"

NOVEMBER 2000 - The month was the coldest November since 1991 and will go into the record books as the 32nd coldest November for the past 106 years and the 41st driest November since 1896. Both near-record high temperatures and near-record low's occurred during the month. Temperatures averaged 44.1 degrees which was 2.7 degrees below normal. Precipitation (liq. equ.) totaled 3.14 inches statewide which was 0.88 inches below normal and 78 percent of normal rainfall.

DECEMBER 2000 - December will go into the record books as the fourth coldest December in the past 106 years. The coldest was in 1989 with an average temperature of 25.3 degrees. For several locations, it was the coldest December on record: Paducah, Louisville, Lexington and Jackson all reported record-breaking cold temperatures. Numerous Arctic cold fronts moved through the Ohio Valley providing snowcover and bitter cold temperatures for much of the month. Some Eastern locations reported greater than 20 days with snowcover. Temperatures averaged 26.3 degrees which was 10.2 degrees below normal. Precipitation (liq. equ.) totaled 4.50 inches statewide which was 1.05 inches above normal. Considerable snowfall occurred across the Commonwealth with some locations reporting record monthly snowfall totals.

JANUARY 2001 - After a very cold December, January 2001 was more seasonal. Temperatures averaged 31.7 degrees which was -0.1 degrees from normal. Snowfall totals ranged from 2 to 4 inches West, 4 to 8 inches Central and East. Total snowfall accumulations so far this winter ranged from 8 to 10 inches in the West, to 10 to 18 inches Central and East. Precipitation (liq. equ.) totaled 2.37 inches statewide which was 1.00 inch below normal.

FEBRUARY 2001 - Temperatures averaged 40.9 degrees which was 4.8 degrees above normal. Precipitation (liq. equ.) totaled 4.37 inches statewide which was 0.72 inches above normal.

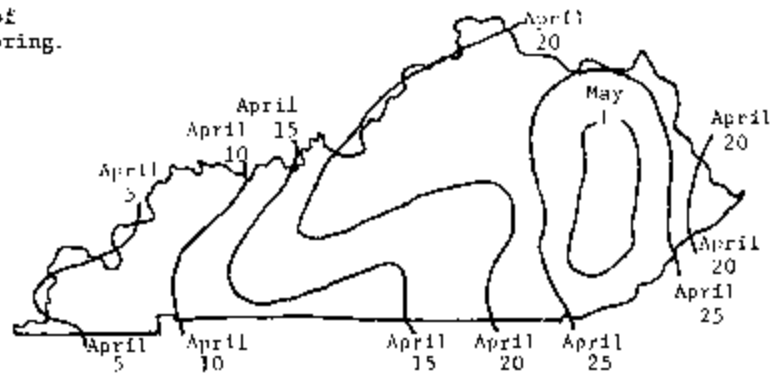
MARCH 2001 - March began with below average temperatures and moderate rain which kept soil moisture adequate to surplus. Mild seasonal weather began prior to mid-month with light scattered showers. Through the end of the month a series of cold fronts brought cooler, drier periods followed by warmer, wet weather.

KENTUCKY FREEZE RISK: The winter of 2000-2001 began with extremely cold temperatures through November and December. Precipitation returned in December and mid-February relieving drier conditions. Milder temperatures prevailed after late January. Mild temperatures in early March accelerated winter wheat growth and budding of trees. Most areas of Kentucky still have a 90 percent chance or greater of experiencing freezing temperatures this spring. Data below are norms from the 1961 - 1990 period with the average date of the last temperatures of 32 degrees or lower being shown in the 50 percent column. All freeze data are based on temperatures at approximately 5 feet above ground and in a representative exposure.

FREEZE DATE PROBABILITIES 1961 - 1990

	Last Spring Occurrence				
	Earliest	90%	50%	10%	Latest
<u>District 1</u>					
Golden Pond	March 17	March 22	April 6	April 21	May 27
Lovellsville	March 7	March 30	April 12	April 25	May 9
Mayfield	March 22	March 29	April 12	April 26	May 4
Paducah	March 7	March 21	April 4	April 18	April 23
<u>District 2</u>					
Beaver Dam	March 22	March 31	April 17	May 4	May 10
Henderson	March 22	March 26	April 8	April 21	May 1
Hopkinsville	March 22	March 26	April 9	April 23	May 1
Madisonville	March 11	March 25	April 9	April 24	May 4
Owensboro	March 22	March 28	April 11	April 25	May 4
Princeton	March 22	March 26	April 12	April 29	May 27
<u>District 3</u>					
Bowling Green	March 22	March 26	April 10	April 25	May 4
Campbellsville	March 22	March 30	April 13	April 27	May 10
Glasgow	March 22	April 1	April 16	May 1	May 10
Greensburg	March 23	April 3	April 18	May 3	May 13
Leitchfield	March 22	March 31	April 18	May 6	May 10
Louisville	March 22	March 24	April 10	April 27	May 10
Mammoth Cave	March 29	April 7	April 25	May 13	May 27
Scottsville	March 22	March 23	April 10	April 28	May 27
<u>District 4</u>					
Carrollton	April 3	April 7	April 21	May 5	May 9
Covington	March 25	April 6	April 20	May 4	May 10
Falmouth	April 9	April 13	May 1	May 19	June 1
Williamstown	March 25	April 1	April 18	May 5	May 27
<u>District 5</u>					
Berea College	March 25	April 1	April 15	April 29	May 10
Danville	March 23	March 31	April 14	April 28	May 11
Farmers	April 3	April 13	April 30	May 17	May 27
Frankfort	April 2	April 6	April 20	May 4	May 10
Lexington	March 25	April 3	April 17	May 1	May 10
Maysville	March 26	April 3	April 22	May 11	May 27
Shelbyville	March 26	April 5	April 23	May 11	May 17
<u>District 6</u>					
Ashland	April 11	April 16	May 3	May 20	June 11
Barbourville	March 26	April 9	April 26	May 13	May 27
London	March 22	April 4	April 22	May 10	May 27
Manchester	April 11	April 15	May 3	May 21	June 5
Middlesboro	April 8	April 14	April 29	May 14	May 27
Mount Vernon	April 7	April 13	April 28	May 13	May 27
Somerset	March 23	April 4	April 22	May 10	May 27
Williamsburg	April 3	April 6	April 23	May 10	May 27

Average Date of
Last 32° in Spring.



Definitions of Terms used in subsequent releases.

- Topsoil Moisture:** (Topsoil is defined as the top 4 - 6 inches of soil.)
Very Short - Soil extremely dry. Pastures and crops stressed with possible deterioration.
Short - Soil dry. Seed germination and/or normal crop growth and development would be curtailed.
Adequate - Soil moist. Seed germination and/or crop growth and development would be normal or unhindered.
Surplus - Soil wet. Fields may be muddy and will generally be unable to absorb additional moisture. Young developing crops may be yellowing from excess moisture.
- Days Suitable for Fieldwork:** A "suitable" day is one where weather and field conditions allow producers to work in fields a major portion of that day.
- Crop Condition:**
Very Poor - Extreme degree of loss to yield potential, complete or near crop failure. Pastures provide very little or no feed considering the time of year. Supplemental feeding is required to maintain livestock condition.
Poor - Heavy degree of loss of yield potential which can be caused by excess soil moisture, drought, disease, etc. Pastures are providing only marginal feed for the current time of year. Some supplemental feeding is required to maintain livestock condition.
Fair - Less than normal crop condition. Yield loss is a possibility but the extent is unknown. Pastures are providing generally adequate feed but is still less than normal for the time of year.
Good - Yield prospects are normal or above. Moisture levels are adequate with only light disease and insect damage. Pastures are providing adequate feed supplies for the current time of year.
Excellent - Yield prospects are above normal and crops are experiencing little or no stress. Pastures are supplying feed in excess of what is normally expected at the current time of year.
- Crop Progress Percents:** Percents should indicate the progress of field activities or crop development. If, for example, half of the total current year soybean acreage expected is planted, a value of 50 percent should be used. If weather conditions alter plans such that intentions are prevented, a 100 percent should be used when planting stops. Progress percents should relate to acres. An acre should be considered to be in or beyond a phenological stage when 50 percent or more of the plants in that acre are in or beyond that stage. Generally, you should consider a given field to be in a particular stage when 50 percent or more of the plants have reached or gone beyond that stage.

FREEZE INJURY IN WHEAT

Growth Stage	Injurious temp. (2 hours)	Primary Symptoms	Yield Effect
Tillering (1 - 5) ^a	12° F	Leaf chlorosis; burning of leaf tips; silage odor, blue cast to fields	Slight to moderate
Jointing (6 - 7)	24° F	Death of growing point; leaf yellowing or burning; lesions, splitting, or bending of lower stem, odor	Moderate to severe
Boot (10)	28° F	Floret sterility; spike trapped in boot; damage to lower stem; leaf discoloration; odor	Moderate to severe
Heading (10.1 - .5)	30° F	Floret sterility; white awns or white spikes; damage to lower stem; leaf discoloration	Severe
Flowering (10.51 - .54)	30° F	Floret sterility; white awns or white spikes, damage to lower stem; leaf discoloration	Severe
Milk (11.1)	28° F	White awns or white spikes; damage to lower stems; leaf discoloration, shrunken, roughened, or discolored kernels	Moderate to severe
Dough (11.2)	28° F	Shriveled, discolored kernels; poor germination	Slight to moderate

^a Numbers in parentheses refer to the Feekes scale

Palouse:
Late April to
mid May

Snake River
Valley:
Mid May to
early June

Central
California
Valleys:
Late Feb
to Mid Mar

VARIES

CONSIDERABLY

LITTLE

Please use this map with caution.
This map is intended to be a general
representation, and there are changes in the
average date may occur in short distances
due to differences in elevation, soil type,
vegetation, closeness to water, air
circulation, and urban heat effects.

Data source: National Climatic Data Center (NCDC)
Co-operative station data 1951-80.
Analysis by Joint Agricultural Weather Facility (NOAA/USDA).

Legend

A = Freeze occurs after specified dates
B = Freeze occurs before specified dates
--- Spring freeze occurs in south of a line
less than 1 in 10 years

**UNITED STATES DEPARTMENT OF AGRICULTURE
KENTUCKY AGRICULTURAL STATISTICS SERVICE
AGRICULTURAL STATISTICIAN
POST OFFICE BOX 1120
LOUISVILLE, KENTUCKY 40201-1120**

PRESORT
FIRST-CLASS MAIL
POSTAGE & FEES PAID
USDA
PERMIT NO. G-38